

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A fuel cell compression assembly, comprising:

a carriage unit having at least two opposing side walls maintained in spaced relation by a base member extending between the at least two opposing side walls;

wherein the at least two opposing side walls and the base member define a cradle for receiving fuel cell plates, and wherein the at least two opposing side walls each includes engagement members on an internal face for engaging with a top member comprising a top of the carriage unit, the base member being below the engagement members;

wherein the engagement members comprise corresponding engagement members spaced at intervals down the at least two opposing side walls;

wherein the engagement members each comprise teeth projecting inwardly towards an internal volume of the carriage unit; and

wherein at least one of the teeth has an asymmetric profile allowing passage of the top member in a first direction but not in a second direction that is opposite to the first direction.

2 to 4. (Cancelled)

5. (Currently Amended) The fuel cell compression assembly of claim 1, wherein the at least two opposing side walls are formed of a material having sufficient resilience to allow [[a]] the top member to be engaged with the carriage unit by passage over, and temporary displacement of, an at least some of the engagement members member.

6. (Currently Amended) The fuel cell compression assembly of claim 1, wherein the teeth extend along a ~~substantial~~ lateral extent of the at least two opposing side walls.

7. (Previously Presented) The fuel cell compression assembly of claim 1, wherein each of the teeth has an asymmetric profile allowing passage of the top member thereover in a first direction but not in a second direction opposite to the first direction.

8. (Previously Presented) The fuel cell compression assembly of claim 7, wherein each of the teeth has a profile allowing disengagement of the top member in a direction parallel to axes of the teeth.

9. (Previously Presented) The fuel cell compression assembly of claim 1, wherein each of the at least two opposing side walls includes ventilation apertures.

10. (Previously Presented) The fuel cell compression assembly of claim 1, wherein a direction of engagement of the top member relative to the at least two opposing side walls is perpendicular to a plane of the base member.

11. (Previously Presented) The fuel cell compression assembly of claim 1, wherein the top member comprises at least two corresponding engagement members for engaging with each of the engagement members on respective side walls of the carriage unit.

12. (Currently Amended) The fuel cell compression assembly of claim 1, wherein each engagement member is situated in a recess of one of the at least two opposing side walls ~~a side wall~~.

13. (Previously Presented) The fuel cell compression assembly of claim 12, wherein the top member is adapted to be received into one or more recesses in the at least two opposing side walls.

14. (Previously Presented) The fuel cell compression assembly of claim 1, wherein the carriage unit comprises aluminium.

15. (Previously Presented) The fuel compression assembly of claim 1, wherein the base member and/or the top member comprise a box-section aluminum extrusion.

16. (Previously Presented) The fuel compression assembly of claim 1, further comprising location features on external walls of the fuel compression assembly, the location features for provision of fuel tanks or other system hardware.

17. (Currently Amended) A fuel compression assembly, comprising:
a carriage unit cradle for receiving a stack of fuel cell plates and for maintaining at least some of the fuel cell plates overlapped; and
a closure member adapted to close a carriage unit containing the carriage unit cradle and to apply pressure to the fuel cell plates via automatic locking engagement with the carriage unit cradle when the closure member is brought into position with the carriage unit cradle in a first direction that is orthogonal to a plane of the fuel cell plates;
wherein the carriage unit cradle and the closure member comprise interlocking teeth that inhibit return of the closure member in a second direction opposite to the first direction; and
wherein the interlocking teeth provide a plurality of automatic locking positions at varying distances along the first direction.

18 and 19. (Cancelled)

20. (Currently Amended) A method of forming a fuel cell stack, comprising:

receiving a plurality of fuel cell plates in a confinement volume of a carriage unit cradle, the fuel cell plates forming a stack;

applying a carriage unit closure member to compress the fuel cell plates in a first direction orthogonal to a plane of the fuel cell plates and to engage the closure member with the carriage unit cradle; and

automatically locking the closure member and the cradle when the closure member reaches a predefined degree of compression of the fuel cell plates;

wherein the carriage unit cradle and the closure member comprise interlocking teeth that inhibit return of the closure member in a second direction opposite to the first direction; and

wherein the interlocking teeth provide a plurality of automatic locking positions at varying distances along the first direction.

21. (Previously Presented) The method of claim 20, further comprising passing through a series of successive automatic locking engagement positions between the closure member and the carriage unit cradle which are intermediate to a starting position and a final position at which the closure member has reached an appropriate degree of compression of the fuel cell plates.

22 and 23. (Cancelled)